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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,496	07/07/2003	Eric Stephane Fourcault	80350-1100	6363
24504	7590	08/02/2006	EXAMINER	
THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948			DAVIS, DANIEL J	
			ART UNIT	PAPER NUMBER
			3733	

DATE MAILED: 08/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/614,496

Applicant(s)

FOURCAULT ET AL.

Examiner

D. Jacob Davis

Art Unit

3733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 5 is objected to because of the following informalities: "grooves varies" is incorrect usage. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3-11 are rejected under U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,402,757 to Moore, III et al. in view of U.S. Patent No. 6,306,140 to Siddiqui and in further view of U.S. Patent No. 5,897,319 to Wagner et al. and in further view of U.S. Patent No. 3,811,119 to Morse. Moore discloses in figure 5 a compression screw for a fractured bone comprising a proximal portion having an enlarged head 16, a threadless intermediate portion 46, a distal portion 48, grooves 23 and 32 and preparation means 34.

Moore fails to disclose that the head is threaded. Siddiqui teaches a compression screw for a fractured bone including an enlarged head having threads. It would have been obvious to one of ordinary skill in the art at the time the invention was made to thread the proximal head to increase grip with the proximal bone portion.

Moore and Siddiqui fail to disclose that the grooves are helical. Wagner teaches a fastener having a groove that is helical. Morse teaches the advantages of a helical groove including avoiding clogging with an increase in the amount of space to receive the cut material (paragraphs 4 and 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the Moore grooves helical to increase the amount of space to receive the cut material and avoid clogging.

Column 3, lines 22-24 of the Moore reference discloses the angle of the cutting edges to be between 15 and 30 degrees.

Moore fails to disclose whether or not the grooves have a variable or a constant depth. (Inherently, the device must have one or the other if not both.) It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the grooves 23 to have a variable depth such that as the diameter of the head increases, the depth of the groove also increases to receive more material that is cut away. Furthermore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the depth of the grooves 32 constant. Grooves 32 cut into the body of the fastener.

Figure 5 illustrates a first tooth 34 between the bore and the groove. The opposing groove 32 is not illustrated and hence a second tooth 34 is also not illustrated. Nevertheless, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a second tooth/preparation means 34 adjacent the other groove 32 to cut into hard tissue.

***Response to Arguments***

Applicants' arguments regarding the objection to the drawings are persuasive and the objection is withdrawn.

Applicants' amendment to claim 3 obviates the rejection under 35 U.S.C. 112, first paragraph.


Applicants have amended claim 1 to overcome the rejection under 35 U.S.C. 103(a) as being unpatentable over Moore in view of Siddiqui. However, Wagner and Morse cure the deficiencies by teaching the desirability to make the grooves helical.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to D. Jacob Davis whose telephone number is (571) 272-4693. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eduardo C. Robert can be reached on (571) 272-4719. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
DJD

  
EDUARDO C. ROBERT  
SUPERVISORY PATENT EXAMINER